rior chambers and or to the curvature of the I.D. of the lens capsule provide for an even distribution of pressure over the chamber surface.

It can be seen therefore that the coil spring loops of the present invention eliminate a serious deficiency of the prior art intraocular lenses. Specifically, the coil spring loops eliminate the problem of excess pressure which can occur in either the anterior or posterior chambers or in the lens capsule when the chamber is contacted at too small a number of points; usually, at one fine point only. This excess pressure could cause potential wounding of the eye structure and may also cause a tenderness in the eye area. If on the other hand the intraocular lenses are designed with too resilient a loop structure, this may reduce the pressure but may allow the lens to move around which can cause irritation and potentially blurred vision. The coil spring loops of the present invention overcome these and other deficiencies and allow for a more satisfactory intraocular lens implant. In addition, because the coil spring loop is so flexible and adjusts to so many different surface shapes of the chambers, the number of sizes of intraocular lenses that is necessary may be greatly reduced and it may even be possible to use a single size for almost all patients.

It should be appreciated that although the invention has been described with reference to particular embodiments, other adaptations and modifications may be made. For example, the coil spring loops may be attached to the lens using other techniques and the lenses themselves may take different forms including foldable lenses. In addition, although the coil spring loops have been shown to be uniformly wound helixes of uniform diameter and made of filament of uniform thickness, the helixes do not necessarily have to be uniformly wound and uniform in diameter and the filament may have differing thickness.

For example, the helixes can be tapered so that the coil spring has a smaller or larger diameter at the ends and the spacing between the coils may also be varied if desired. In addition, the thickness of the filament material may be varied, if desired to produce particular flexible characteristics for the coil spring loop. In each instance, however, the desired result is to provide for a relatively uniform pressure exerted by the coil spring loop at a great number of points so as to distribute the pressure in the anterior or posterior chambers without any one or small number of points receiving excess pressure.

Because the pressure of the coil spring loops are distributed uniformly over a great number of points, this allows the coils to have a high degree of flexibility to maintain the lens in the central position while at the same time, the lens is prevented from moving which movement could cause blurred vision.

Although the invention has been described with reference to particular embodiments, it is to be appreciated that various adaptations and modifications may be made and the invention is only to be limited by the appended claims.

I claim:

1. An intraocular lens adapted to be implanted within an eye adjacent the iris of the eye in either the anterior or posterior position or in the lens capsule, including,

a lens portion,

at least one flexible fixation means carried by the lens portion for supportive engagement with the eye structure in either the anterior or posterior position or in the lens capsule to centrally position the lens portion within the eye structure, and

the at least one flexible fixation means formed as a flexible loop attached to the lens portion and with the loop formed by a coil spring including a large plurality of adjacent turns to form a helix for distributing the supportive engagement with the eye structure over a large number of the turns of the helix.

2. The intraocular lens of claim **1** including two flexible fixation means carried by the lens portion and extending from opposite sides of the lens portion.

3. The intraocular lens of claim **1** wherein the lens portion includes at least two post portions and with the ends of the coil spring loop attached to and seated on the post portions.

4. The intraocular lens of claim **1** wherein the lens portion include at least one flange portion having an opening to receive and secure the ends of the coil spring loop.

5. The intraocular lens of claim **1** wherein the coil spring loop has the ends of the helix attached to the lens portion.

6. The intraocular lens of claim **1** wherein the helix is uniform in diameter.

7. The intraocular lens of claim **1** wherein the helix is formed of filament material of uniform thickness.

8. The intraocular lens of claim **1** wherein the coil spring loop is formed of plastic filament material.

9. The intraocular lens of claim **8** wherein the plastic filament material is polypropylene.

10. An attachment means for use with a lens portion of an intraocular lens of the type adapted to be implanted within an eye adjacent the iris of the eye in either the anterior or posterior position or in the lens capsule, the attachment means including,

at least one flexible fixation means carried by the lens portion for supportive engagement with the eye structure in either the anterior or posterior postion or in the lens capsule to centrally position the lens portion within the eye structure, and

the at least one flexible fixation means formed as a flexible loop attached to the lens portion and with the loop formed by a coil spring including a large plurality of adjacent turns to form a helix for distributing the supportive engagement with the eye structure over a large number of the turns of the helix.

11. The attachment means of claim **10** including two flexible fixation means carried by the lens portion and extending from opposite sides of the lens portion.

12. The attachment means of claim **10** wherein the lens portion includes at least two post portions and with the ends of the coil spring loop for attachment to and seating on the post portions.

13. The attachment means of claim **10** wherein the lens portion includes at least one flange portion having an opening and with the ends of the coil spring loop for reception by the opening.

14. The attachment means of claim **10** wherein the coil spring loop has the ends of the helix for attachment to the lens portion.

15. The attachment means of claim **10** wherein the helix is uniform in diameter.

16. The attachment means of claim **10** wherein the helix is formed of filament material of uniform thickness.

17. The attachment means of claim **10** wherein the coil spring loop is formed of plastic filament material.

18. The attachment means of claim **17** wherein the plastic filament material is polypropylene.

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